

Application No.: 10/025,547
Amendment Dated: August 13, 2003
Reply to Office Action of: May 13, 2003

REMARKS

Applicants respectfully request reconsideration of the application, as amended, in view of the following remarks.

Applicants note that they have included the limitation of Claim 2 in Claims 1 and 21.

The present invention as set forth in **amended Claim 21** relates to a **molding composition**, comprising:

at least 50% by weight of the following components:

- a) **from 30 to 70 parts by volume of i) at least 0.1 part by volume of polyamine-polyamide copolymer or ii) a combination of a polyamide and at least 0.1 part by volume of polyamine-polyamide copolymer; wherein said polyamine-polyamide copolymer is prepared using the following monomers:**
 - α) **from 0.1 to 25% by weight, based on the polyamine-polyamide copolymer, of a polyamine containing at least 3 nitrogen atoms, and**
 - β) **a polyamide-forming monomer selected from the group consisting of a lactam; a ω -aminocarboxylic acid; an equimolar combination of a diamine and a dicarboxylic acid; and a mixture thereof,**
- b) **from 0.1 to 70 parts by volume of an olefin polymer containing a functional group,**

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- c) from 69.9 to 0 parts by volume of an unfunctionalized polyolefin,
wherein the sum of the parts by volume of a), b) and c) is 100.

BP Chemicals Limited fails to disclose or suggest a molding composition having inter alia

- a) from 30 to 70 parts by volume of i) at least 0.1 part by volume of polyamine-polyamide copolymer or ii) a combination of a polyamide and at least 0.1 part by volume of polyamine-polyamide copolymer.

BP Chemicals Limited disclose a multilayered structure comprising a first polyolefin or styrenic polymer layer and a second polyketone layer bonded with an intermediate layer having (A) a graft copolymer, (B) a polyamide and (C) optionally a polyolefin. The polyamide (B) is further defined at page 5, line 31 to page 6, line 33 of BP Chemicals Limited. The polyamide itself can be made from a primary diamine and a dicarboxylic acid (BP Chemicals Limited, page 6, lines 2 and 3). However, there is no disclosure or suggestion of a **polyamine-polyamide copolymer** as claimed and prepared from the monomers as claimed.

Therefore, the rejection of Claim 21 under 35 U.S.C. §102(b) as anticipated by BP Chemicals Limited is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

The rejection of Claims 1, 4-15, 17 and 21 under 35 U.S.C. §103(a) as being unpatentable over Betremieux et al is respectfully traversed.

The present invention as set forth in **amended Claim 1** relates to a **multilayer composite**, comprising:

the following layers bound directly to one another:

a layer I of a polyamide molding composition;

a layer II of a bonding agent comprising at least 50% by weight of a mixture of

a) from 30 to 70 parts by volume of i) at least 0.1 part by volume of a polyamine-polyamide copolymer or ii) a mixture of a polyamide, and at least 0.1 part by volume of a polyamine-polyamide copolymer;

wherein said polyamine-polyamide copolymer is prepared using the following monomers:

- α) from 0.1 to 25% by weight, based on the polyamine-polyamide copolymer, of a polyamine containing at least 3 nitrogen atoms, and
 - β) a polyamide-forming monomer selected from the group consisting of a lactam; a ω -aminocarboxylic acid; an equimolar combination of a diamine and a dicarboxylic acid; and a mixture thereof,
 - b) from 0.1 to 70 parts by volume of an olefin polymer containing a functional group,
 - c) from 69.9 to 0 parts by volume of an unfunctionalized polyolefin,
- wherein the sum of the parts by volume of a), b) and c) is 100; and

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a layer III of a polyolefin molding composition.

Betremieux et al fail to disclose or suggest a multilayer composite or a molding composition having inter alia

a) from 30 to 70 parts by volume of i) at least 0.1 part by volume of a **polyamine-polyamide copolymer** or ii) a mixture of a polyamide, and at least 0.1 part by volume of a **polyamine-polyamide copolymer** as claimed in Claims 1 and 21 of the present invention.

Betremieux et al disclose a material including a polymer A including 1) at least one product chosen from polyamides, polyamide blends and copolymers which have polyamide blocks and polyether blocks, 2) at least one product chosen from polyethylene, ethylene copolymers, polypropylene, propylene copolymers and their grafts with unsaturated dicarboxylic acid or its anhydride. Polymer A is adhered to vulcanized EPDM or EPM (Betremieux et al, abstract). However, there is no disclosure or suggestion of a **polyamine-polyamide copolymer** as claimed and prepared from the monomers as claimed.

Therefore, the rejection of Claims 1,4-15, 17 and 21 under 35 U.S.C. §103(a) as being unpatentable over Betremieux et al is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

In addition, the rejection of Claims 1, 4-13, and 20-21 under 35 U.S.C. §103(a) as being unpatentable over Mitsubishi is respectfully traversed.

Mitsubishi fail to disclose or suggest a multilayer composite or a molding composition having inter alia

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a) from 30 to 70 parts by volume of i) at least 0.1 part by volume of a **polyamine-polyamide copolymer** or ii) a mixture of a polyamide, and at least 0.1 part by volume of a **polyamine-polyamide copolymer** as claimed in Claims 1 and 21 of the present invention.

Mitsubishi disclose a packing self-adhesive film having polyolefin resin layers on each side of a polyamide resin layer, the layers being connected by adhesive layers (Mitsubishi, abstract). However, there is no disclosure or suggestion of a **polyamine-polyamide copolymer** as claimed and prepared from the monomers as claimed.

Therefore, the rejection of Claims 1, 4-13, and 20-21 under 35 U.S.C. §103(a) as being unpatentable over Mitsubishi is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

In addition, the rejection of Claim 21 under 35 U.S.C. §103(a) as being unpatentable over Kohan et al is respectfully traversed.

Kohan et al fail to disclose or suggest a molding composition having inter alia

a) from 30 to 70 parts by volume of i) at least 0.1 part by volume of **polyamine-polyamide copolymer** or ii) a combination of a polyamide and at least 0.1 part by volume of **polyamine-polyamide copolymer**.

Kohan et al disclose blends of polyamide with an olefin copolymer containing groups derived from α , β -unsaturated carboxylic acid (Kohan et al, abstract). However, there is no disclosure or suggestion of a **polyamine-polyamide copolymer** as claimed and prepared

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from the monomers as claimed.

Therefore, the rejection of Claim 21 under 35 U.S.C. §103(a) as being unpatentable over Kohan et al is believed to be unsustainable as the present invention is neither anticipated nor obvious and withdrawal of this rejection is respectfully requested.

The rejections of Claims 1-15, 17 and 21 under 35 U.S.C. §103(a) as being unpatentable over Betremieux et al in view of Oenbrink et al, of Claims 1-13 and 20-21 under 35 U.S.C. §103(a) as being unpatentable over Mitsubishi in view of Oenbrink et al, of Claims 16 and 19 under 35 U.S.C. §103(a) as being unpatentable over Betremieux et al in view of Oenbrink et al and further in view of Pfleger , and of Claim 18 under 35 U.S.C. §103(a) as being unpatentable over Betremieux et al in view of Oenbrink et al and further in view of Bertero et al are **moot** in view of the fact that the present application and Oenbrink et al were, at the time the invention of the present application was made, owned by Degussa AG. Thus, the **exemption under 103(c)/102(e)** is applicable and above rejections should be withdrawn.

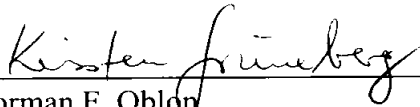
Applicants submit that the present application is now in condition for allowance and early notice of such action is earnestly solicited.

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This application presents allowable subject matter, and the Examiner is kindly requested to pass it to issue. Should the Examiner have any questions regarding the claims or otherwise wish to discuss this case, he is kindly invited to contact Applicants' below-signed representative, who would be happy to provide any assistance deemed necessary in speeding this application to allowance.

Respectfully submitted,

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